OMB No. 1024-0018

NPS Form 10-900
(Rev. 8-86)

United States Department of the Interior
National Park Service

127-0000-0093

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Four Mile Creek Lattice

other names/site number Four Mile Creek Lattice

2. Location

2 miles west & 1 mile north of intersection of F.A.S. 93 and F.A.S. 820

street & number Unmarked county road ☐ not for publication

city, town Wilsey ☐ vicinity

state Kansas code KS county Morris code 47 zip code 66873

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		buildings
☒ public-local	☐ district		sites
☐ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object	1	Total

Name of related multiple property listing:
Metal Truss Bridges in Kansas

Number of contributing resources previously listed in the National Register

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☐ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official — Date: Nov. 16, 1989

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.

☐ determined eligible for the National Register. ☐ See continuation sheet.

☐ determined not eligible for the National Register.

☐ removed from the National Register.

☐ other, (explain:) _____

Signature of Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)
Transportation: Road Related (Vehicular): Bridge

Current Functions (enter categories from instructions)
Transportation: Road Related (Vehicular): Bridge

7. Description

Architectural Classification (enter categories from instructions)
Other: Lattice Pony Truss

Materials (enter categories from instructions)
foundation
walls
roof
other Metal: Wrought Iron or Steel

Describe present and historic physical appearance.

The Four Mile Creek bridge, erected Ca. 1890, is a pin connected lattice pony truss. The single span is 35 feet long and 16 feet wide. The deck rises 10 feet above the creek bed. It is located on a county road southeast of Wilsey. The bridge is located on a slight bend of the road and sits on a slight northeast-southwest alignment. This is often true with early bridges as this misalignment allowed a right angle approach to the river and a saving of money in both bridge and amount of fill required.

The members of a truss bridge are designated either as chord members or web members. Chord members are those mainly defining the outlines of the structure and they are termed lower or upper chord members depending on whether they are found at the bottom or the top of the structure. Members between the chords are web members. They are called posts or ties if they sustain compression or tension respectively. In the instance of the Four Mile Creek bridge, the chords and endposts are fabricated from angle stock rivited to a top cover plate. A bar lattice is used to form the two respective panels, which become a strong and stiff web. No external sway bracing is used in this particular design. Iron eye bars are wrapped around and over the top chord and attached to the bottom chord by the use of a pin. This consists of metal I beams suspended below the bottom chord at these pin connection points. Cast iron sunflowers form a decorative element on both panels. The bridge has not been modified and retains a high degree of its structural integrity.

☐ See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:
☐ nationally ☒ statewide ☐ locally

Applicable National Register Criteria ☐ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Engineering	Ca. 1890	Ca. 1890
Transportation	Ca. 1890	ca. 1890

Cultural Affiliation: N/A

Significant Person: n/a

Architect/Builder: [Canton Bridge Company]

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Town lattice truss was patented by Ithel Town in 1820. The closely spaced diagonal members created a stiff web that was quite strong. The early examples were constructed of wood, but by the late 19th century a few were constructed of metal, generally wrought iron.

No construction data has presently been located about the Four Mile Creek bridge. It was selected as a candidate in this nomination as it is a good example of late lattice truss design with good integrity. It is also of a different design than the Norton county bridges as built by the Canton Bridge Company. The inverted king post which was attached to the former does not exist in this instance. It also features a pin connection and eyebar which would date it earlier than the turn of the century. Design elements such as the cast iron sunflowers at certain points in each panel and the remains of a builder's plate with the remaining letters "ON" would suggest that it is an early version of Canton's lattice truss design. Approximately ten lattice pony trusses are known to exist in Kansas. All are approximately the same length of thirty six feet. Eight of these ten bridges remain in Norton county.

The Canton Bridge Company, Canton, Ohio, was advertising in the Engineering Record, as early as 1876, but little is known about their early history. It was incorporated in 1891 by W. E. Sherlock, President, and V. H. Hammond, Vice President, and C. E. Timkler, Chief Engineer. It is possible that V. H. Hammond was a relative of Wrought Iron Bridge Company's D. Hammond. The company operated independently until 1925, when it was purchase by Massillion Steel Joist Company of Massillion, Ohio. In 1927 the two companies were merged into the Macomber Steel Company and the Canton Bridge Company name was dropped.

The Kansas Department of Transportation (KDOT) carried out a statewide inventory of historic bridges between 1980 and 1983. The bridges to be

☒ See continuation sheet

included were identified through computer printouts developed by KDOT, from information supplied by the counties (since almost all of the historic bridges were located on secondary rather than the primary road system), and by direct observation by field personnel. All bridges were inspected by KDOT personnel to verify the data on file. That information was jointly evaluated by representatives of KDOT, Kansas State Historical Society, and the State Historic Preservation Officer.

Each structure was evaluated using a points rating system adapted from the points evaluation rating developed by the Ohio Department of Transportation and Ohio Historic Preservation Office. Consideration was given to areas such as age, builder, number of spans, length, special features, history, integrity, surviving numbers, and preservation potential.

In many instances there is little information about individual structures. Often bridge plaques which may have contained information have been removed, or the county's records are not complete or have been destroyed. Due to the large numbers of similar structures there is often little to choose from in differentiating among individual bridges other than condition and the likelihood of preservation.

The purpose of the KDOT study and subsequent evaluation was to identify a representative selection of bridges of each class. Through this approach KDOT and KSHS hope to preserve for posterity some examples of each type.

9. Major Bibliographical References

Victor C. Darnell, American Bridge Building Companies, Washington, DC: Society for Industrial Archeology Occasional Publication 4, 1984.

David Weitzman, Traces of the Past: A Field Guide to Industrial Archeology, New York: Charles Schribner's Sons, 1980.

James L. Cooper, Iron Monuments to Distant Posterity, DePauw University, F.H.W.A., Indiana Dept. of Highways, Indiana Dept. Natural Resources, N.P.S., 1987.

Dan G. Deibler, A Survey and Photographic Inventory of Metal Truss Bridges in Virginia, Charlottesville: Virginia Highway & Transporation Research Council, 1975.

☐ See continuation sheet

Previous documentation on file (NPS):
- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:
- ☒ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: Kansas State Historical Society

10. Geographical Data

Acreage of property: less than one acre

UTM References

	Zone	Easting	Northing
A	14	710,412,120	4,275,800
B			
C			
D			

☐ See continuation sheet

Verbal Boundary Description

The nominated property is located on the NE 1/4, NW 1/4, NE 1/4, NE 1/4, section 4, township 17 south, range 7 east on a tract measuring 35' x 16' whose northeast corner is represented by the northeast corner of the bridge. Beginning at the northeast corner the boundary proceeds 35' southwest, 16' northwest, 35' northeast, and 16' southeast to the point of beginning.

☐ See continuation sheet

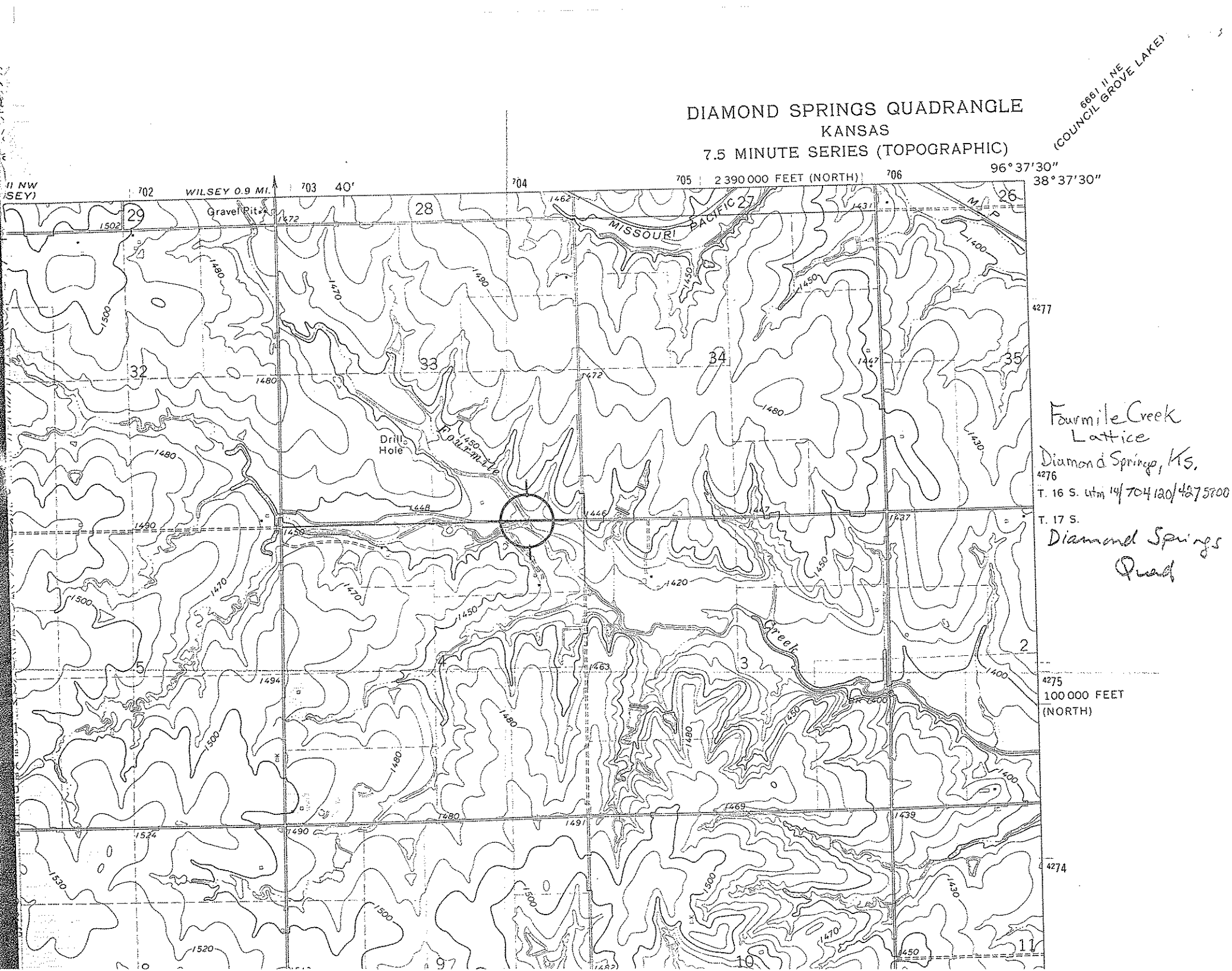
Boundary Justification

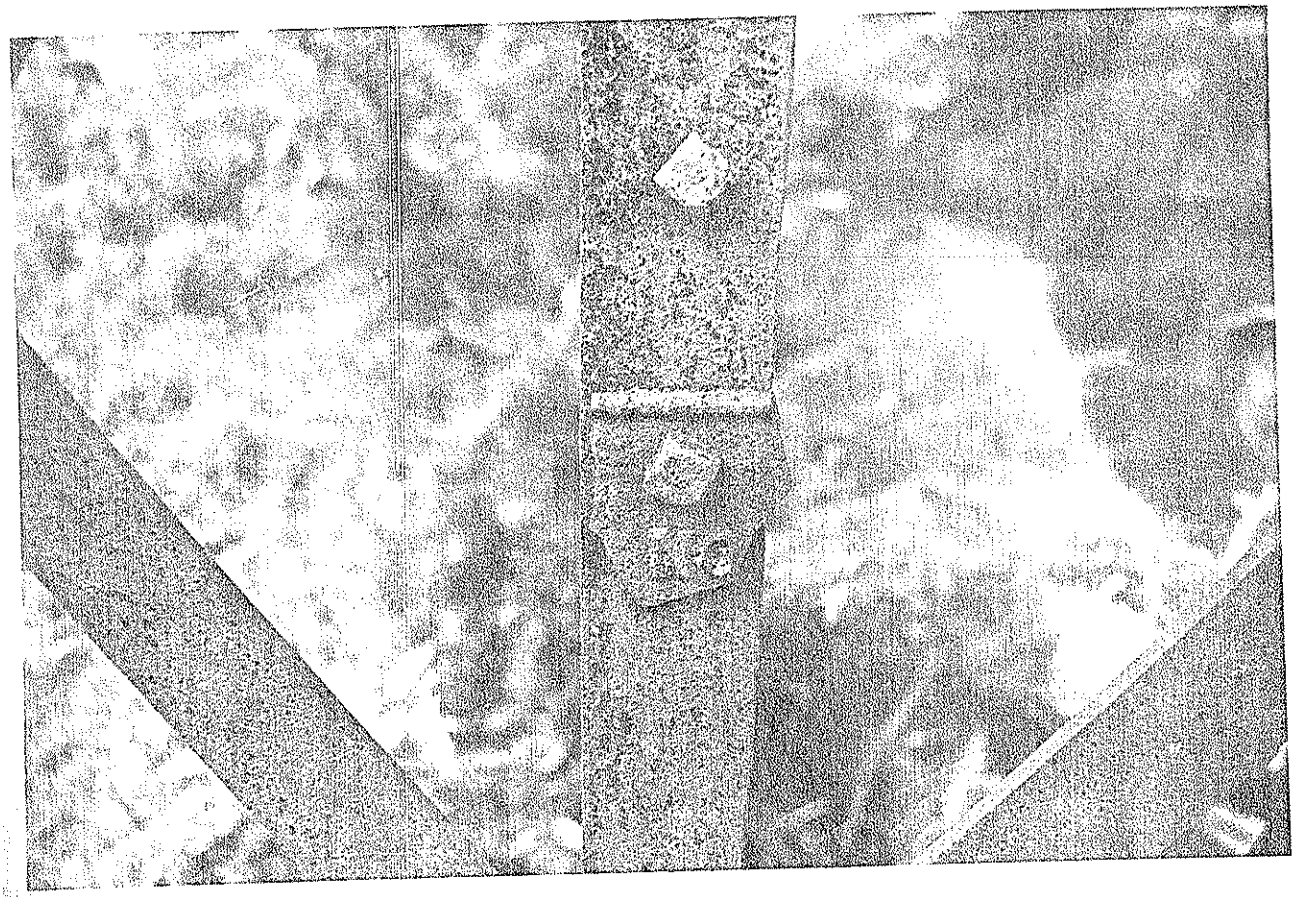
The boundary includes only that area that is historically associated with the nominated property.

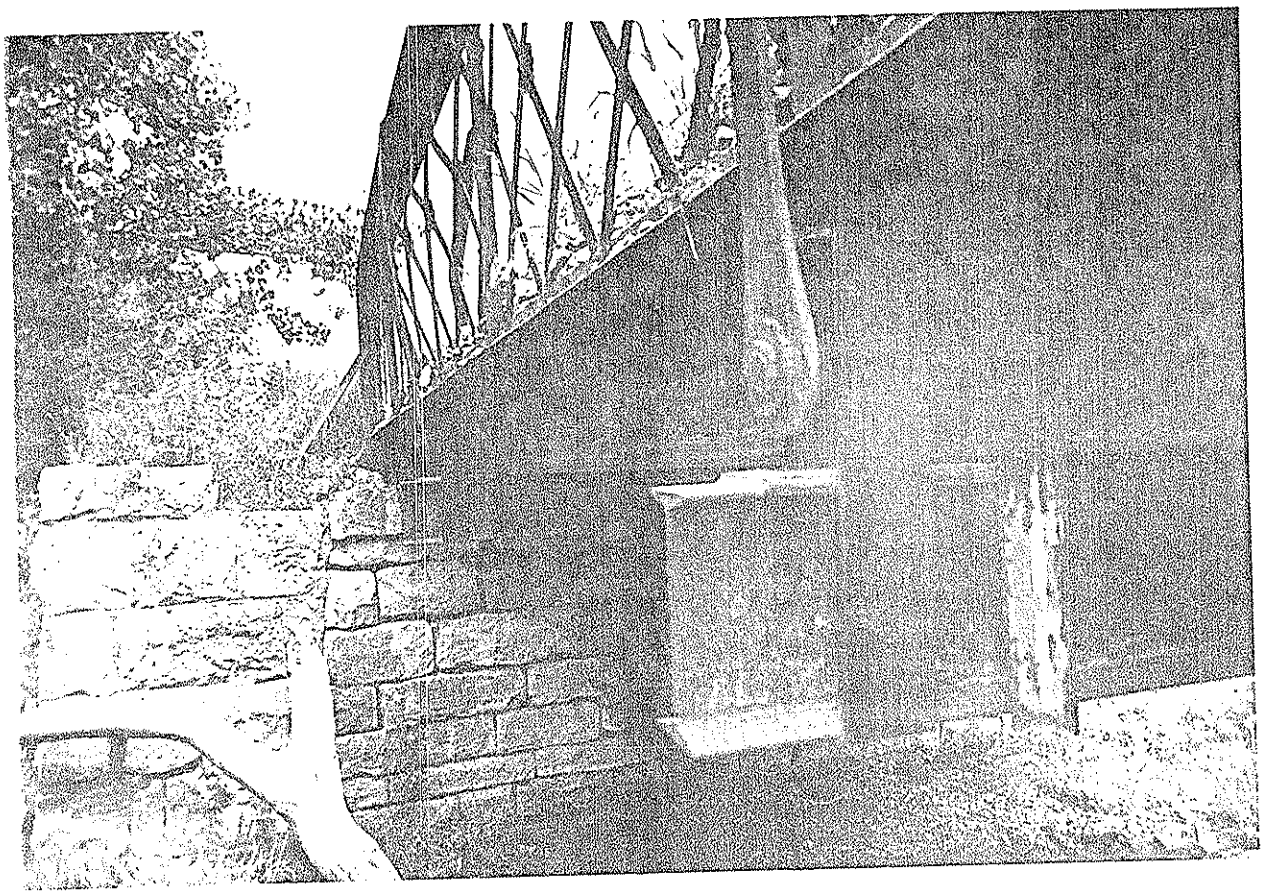
☐ See continuation sheet

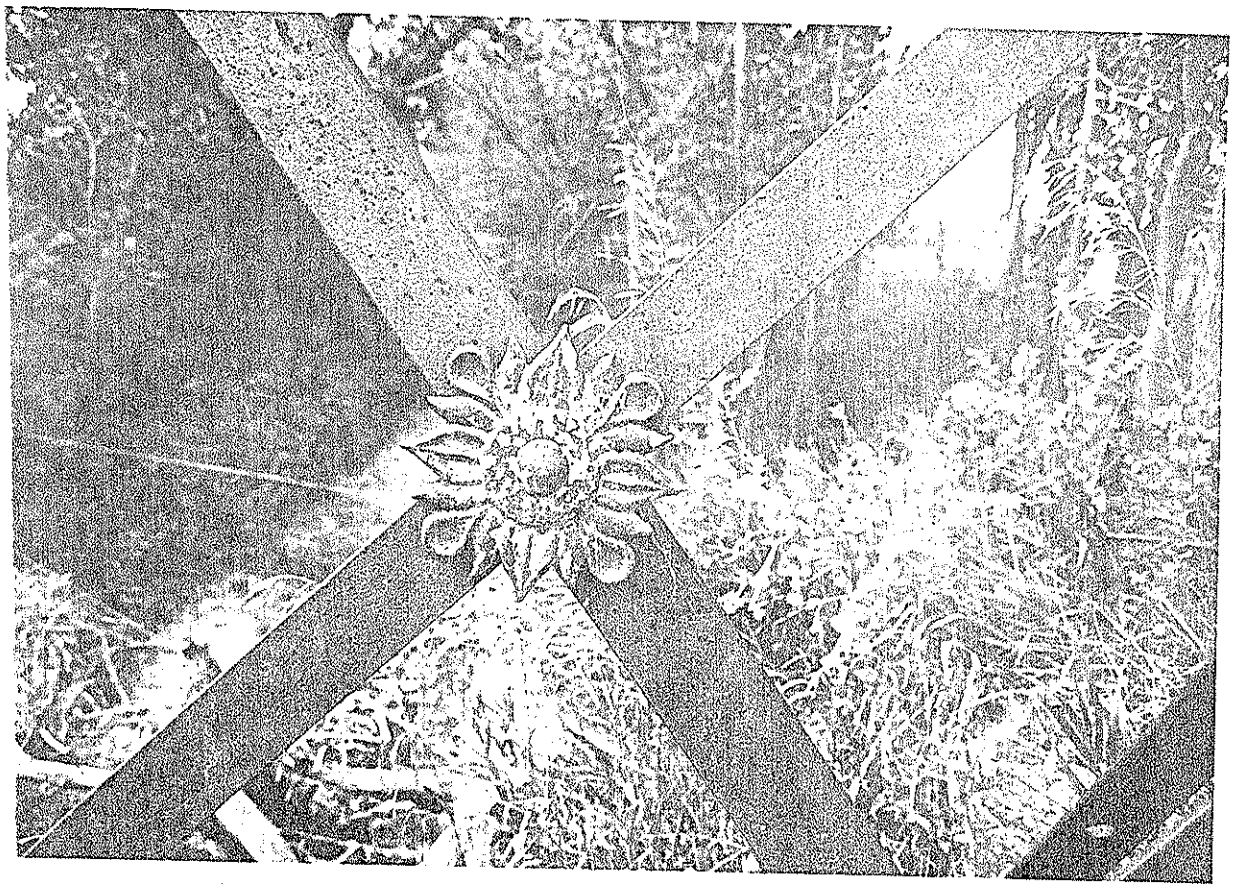
11. Form Prepared By

name/title: Larry Jochims
organization: Kansas State Historical Society
street & number: 120 W. 10th
city or town: Topeka
date: September 20, 1989
telephone: (913) 296-3251
state: KS
zip code: 66612


DIAMOND SPRINGS QUADRANGLE
KANSAS
7.5 MINUTE SERIES (TOPOGRAPHIC)
6661 II NE
(COUNCIL GROVE LAKE)
96°37'30"
38°37'30"
II NW
(SEY)
WILSEY 0.9 MI.
40'
2 390 000 FEET (NORTH)
Gravel Pit
MISSOURI PACIFIC
Drill Hole
Four-mile
Creek
4277
4276
4275
100 000 FEET
(NORTH)
4274
T. 16 S.
T. 17 S.
Fourmile Creek
Lattice
Diamond Springs, Ks,
T. 16 S. utm 14/704120/4275700
Diamond Springs
Quad







Four Mile Creek Lattice
Wilsey, Kansas
Photos taken by Larry Jochims on August 11, 1985
Negatives located at the Kansas State Historical Society
South Side looking NW
1 of 6

Four mile Creek Lattice
Wilsey, Kansas
Larry Jochims
August 11, 1985
Kansas State Historical Society
East approach looking west
2 of 6

Four mile Creek Lattice
Wilsey, Kansas
Larry Jochims
August 11, 1985
Kansas State Historical Society
West approach looking east
3 of 6

Four Mile Creek Lattice
Wilson, Kansas
Larry Jochims
August 11, 1985
Kansas State Historical Society
Remains of Builder's Plaque
4 of 6

Four Mile Creek Lattice
Wilson, Kansas
Larry Jochims
August 11, 1985
Kansas State Historical Society
Bottom Chord Connection
5 of 6

Four Mile Creek Lattice
Wilson, Kansas
Larry Jochims
August 11, 1985
Kansas State Historical Society
Typical detail at panel points
6 of 6

64 LT22

NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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1. Name of Property

historic name

other names/site number Fourmile Creek Lattice

2. Location

2miles west and 1mile north of Intersection of FAS 93 and FAS 820

street & number Unmarked County road ☐ not for publication

city, town Wilson ☐ vicinity

state Kansas code KS county Ottawa code 47 zip code 67893

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		____ buildings
☒ public-local	☐ district		____ sites
☐ public-State	☐ site	1	____ structures
☐ public-Federal	☒ structure		____ objects
	☐ object	1	____ Total

Name of related multiple property listing:

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☐ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official — Date

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.

☐ determined eligible for the National Register. ☐ See continuation sheet.

☐ determined not eligible for the National Register.

☐ removed from the National Register.

☐ other, (explain:) _____

Signature of the Keeper — Date of Action

Function or Use

Historic Functions (enter categories from instructions)
Transportation: Road Related (Vehicular) / Bridge

Current Functions (enter categories from instructions)
Transportation / Road Related (Vehicular) / Bridge

7. Description

Architectural Classification (enter categories from instructions)
Other / Lattice Pony Truss

Materials (enter categories from instructions)
foundation
walls
roof
other Metal / Wrought Iron or Steel

Describe present and historic physical appearance.

The Fourmile Creek bridge, erected Ca. 1890, is a pin Connected lattice Pony truss. The single span is 35 feet long and 16 feet wide. The deck rises 10 feet above the Creek bed. It is located on a County road Southeast of Witsy. The bridge is located on a slight bend of the road and is on a slight northeast-southwest alignment. This is often true with early bridges as this misalignment allowed a right angle approach to the river and a saving of money in both bridge and amount of ROW required.

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☐ See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☒ statewide ☐ locally

Applicable National Register Criteria ☐ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)

Transportation
Engineering

Period of Significance

Ca 1890

Significant Dates

Ca. 1890

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Canton Bridge Company

State significance of property, and justify criteria, criteria considerations, and areas and periods

The Town lattice truss was patented by Ithel Town in 1820. The closely spaced diagonal members created a stiff web that was quite strong. The early examples were constructed of wood, but by the late 19th century a few were constructed of metal, generally wrought iron.

No construction data has presently been located about the Four Mile Creek bridge. It was selected as a candidate in this nomination as it is a good example of late lattice truss design with good integrity. It also of a different design than the Norton county bridges as built by the Canton Bridge Company. The inverted king post which was attached to the former does not exist in this instance. It also features a pin connection and eyebar which would date it earlier than the turn of the century. Design elements such as the cast iron sunflowers at certain points in each panel and the remains of a builder's plate with the remaining letters "ON" would suggest that it is an early version of Canton's lattice truss design. Approximately ten lattice pony trusses are known to exist in Kansas. All are approximately the same length of thirty six feet. Eight of these ten bridges remain in Norton county.

The Canton Bridge Company, Canton, Ohio, was advertising in the Engineering Record, as early as 1876, but little is known about their early history. It was inorporated in 1891 by W. E. Sherlock, President, and V. H. Hammond, Vice President, and C. E. Timkler, Chief Engineer. It is possible that V. H. Hammond was a relative of Wrought Iron Bridge Companies D. Hammond. The company operated independently until 1925, when it was purchased by Massillion Steel Joist Company of Massillion, Ohio. In 1927 the two companies were merged into the Macomber Steel Company and the Canton Bridge Company name was dropped.

☐ See continuation sheet

(over)

9. Bibliographical References

Victor C. Darnell, American Bridge Building Companies, Washington, DC: Society for Industrial Archeology Occaisional Publication 4, 1984.
David Weitzman, Traces of the Past: A Field Guide to Industrial Archeology, New York: Charles Scribner's Sons, 1980.
James L. Cooper, Iron Monuments to Distant Posterity, DePauw University, F.H.W.A., Indiana Dept. of Highways, Indiana Dept. Natural Resources, N.P.S., 1987.
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☐ See continuation sheet

Previous documentation on file (NPS):
- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:
- ☐ State historic preservation office
- ☒ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: Kansas State Historical Society

10. Geographical Data

Acreage of property less than One Acre

UTM References

	Zone	Easting	Northing
A			
B			
C			
D			

X

☐ See continuation sheet

Verbal Boundary Description The nominated property is located on the NE¼ NW¼ NE¼, NE¼ Section 4, Township 17 South, Range 7 East on a tract measuring 35' x 16' whose northeast corner is represented by the northeast corner of the bridge. Beginning at the northeast corner, the boundary proceeds 35 feet southwest, 16 feet northwest, 35 feet northeast and 16 feet southeast to the point of beginning.

☐ See continuation sheet

Boundary Justification

Same

☐ See continuation sheet

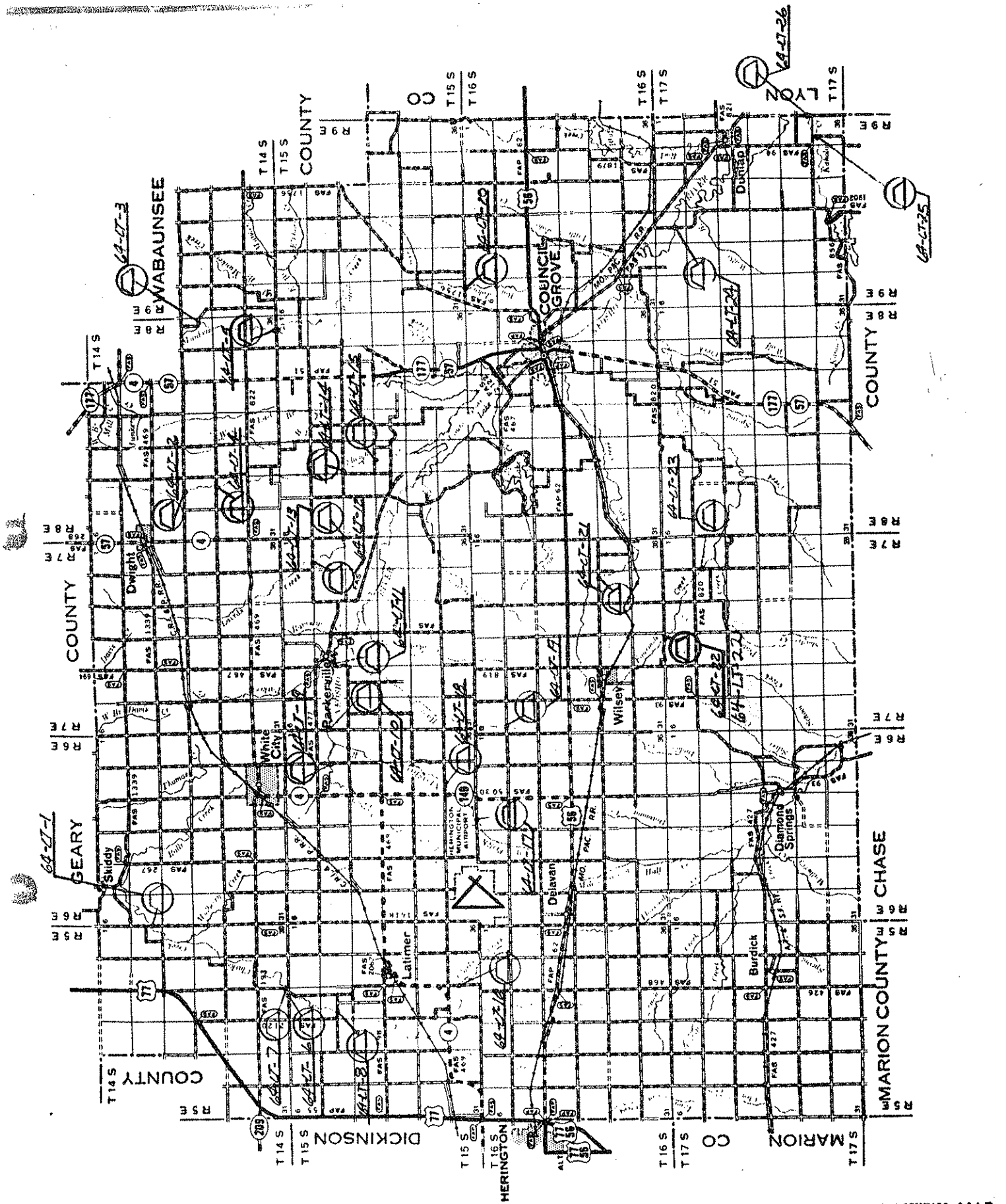
11. Form Prepared By

name/title Same
organization _____ date _____
street & number _____ telephone _____
city or town _____ state _____ zip code _____

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____



LEGEND

ROADS AND ROADWAY FEATURES

- IVE ROAD
- ROVED ROAD
- D AND DRAINED ROAD
- URFACED ROAD
- EL OR STONE ROAD— GRADED OR DRAINED
- L OR STONE ROAD— ED AND DRAINED
- L OR STONE ROAD WITH ILIZED SURFACE
- HOUS ROAD—LOW TYPE
- ROAD
- HIGHWAY
- WITH FULL CONTROL OF AND INTERCHANGE

ROAD SYSTEM DESIGNATION

- FEDERAL-AID INTERSTATE HIGHWAY SYSTEM
- FEDERAL-AID PRIMARY HIGHWAY SYSTEM
- FEDERAL-AID SECONDARY HIGHWAY SYSTEM
- INTERSTATE NUMBERED HIGHWAY (70)
- U S NUMBERED HIGHWAY (40)
- STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY (20)
- END OF DESIGNATED SYSTEM OR MARKED ROUTE (24)

KEY TO COUNTIES

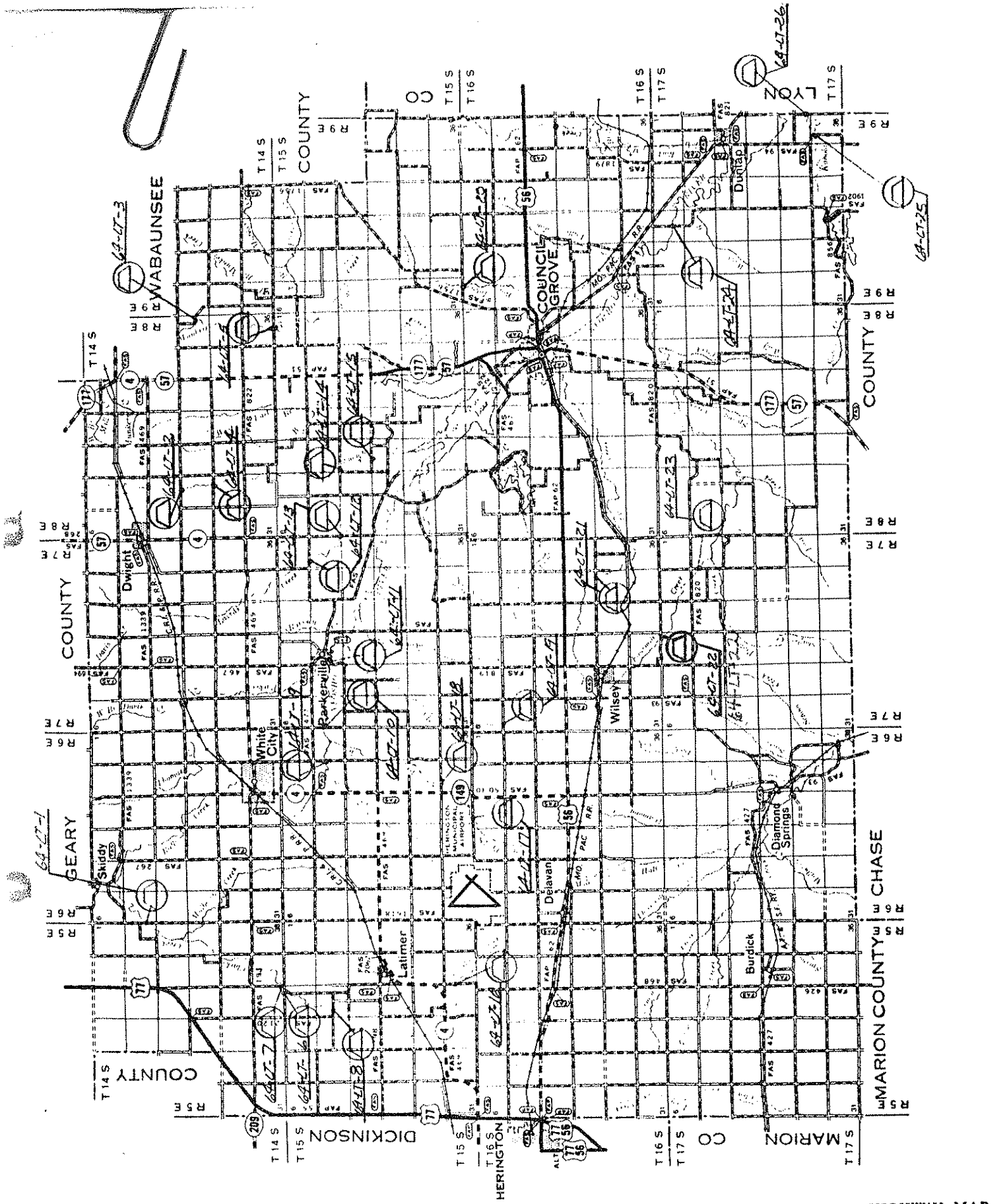
FA SYSTEMS REVISED TO APRIL 1, 1980

GENERAL HIGHWAY MAP
MORRIS COUNTY
KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
PLANNING AND DEVELOPMENT DEPARTMENT
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

SCALE

1976



LEGEND

ROADS AND ROADWAY FEATURES

- ...VER ROAD
- ...PROVED ROAD
- ...ED AND DRAINED ROAD
- ...PROVED ROAD
- ...EL OR STONE ROAD—
- ...T GRADED OR DRAINED
- ...EL OR STONE ROAD—
- ...ADED AND DRAINED
- ...EL OR STONE ROAD WITH
- ...BITUMINOUS SURFACE
- ...INDUS ROAD—LOW TYPE
- ...ROAD
- ...E HIGHWAY
- ...AY WITH FULL CONTROL OF
- ...S AND INTERCHANGE

ROAD SYSTEM DESIGNATION

- FEDERAL-AID INTERSTATE HIGHWAY SYSTEM (FAI)
- FEDERAL-AID PRIMARY HIGHWAY SYSTEM (FAP)
- FEDERAL-AID SECONDARY HIGHWAY SYSTEM (FAS)
- INTERSTATE NUMBERED HIGHWAY (70)
- U.S. NUMBERED HIGHWAY (40)
- STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY (20)
- END OF DESIGNATED SYSTEM OR MARKED ROUTE (24)

KEY TO COUNTIES

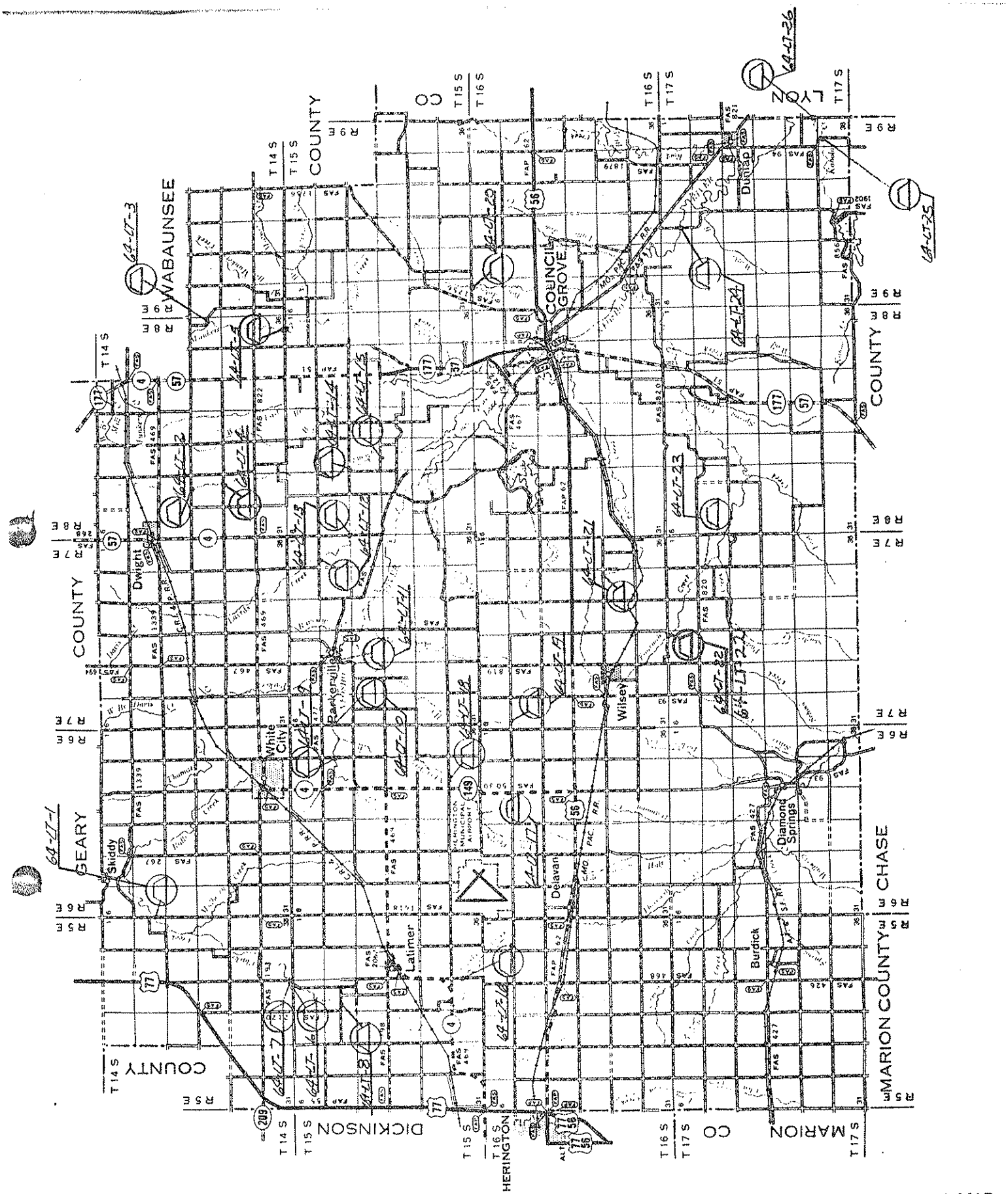
F.A. SYSTEMS REVISED TO APRIL 1, 1980

GENERAL HIGHWAY MAP
MORRIS COUNTY
KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
PLANNING AND DEVELOPMENT DEPARTMENT
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

SCALE

1976



LEGEND

ROADS AND ROADWAY FEATURES

- ...ITIVE ROAD
- ...PROVED ROAD
- ...ED AND DRAINED ROAD
- ...L SURFACED ROAD
- ...VEL OR STONE ROAD—
- ...OT GRADED OR DRAINED
- ...VEL OR STONE ROAD—
- ...RADED AND DRAINED
- ...VEL OR STONE ROAD WITH
- ...TABILIZED SURFACE
- ...MINOUS ROAD—LOW TYPE
- ...ED ROAD
- ...DED HIGHWAY
- ...HWAY WITH FULL CONTROL OF
- ...CESS AND INTERCHANGE

ROAD SYSTEM DESIGNATION

- FEDERAL-AID INTERSTATE HIGHWAY SYSTEM
- FEDERAL-AID PRIMARY HIGHWAY SYSTEM
- FEDERAL-AID SECONDARY HIGHWAY SYSTEM
- INTERSTATE NUMBERED HIGHWAY
- U S NUMBERED HIGHWAY
- STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY
- END OF DESIGNATED SYSTEM OR MARKED ROUTE

KEY TO COUNTIES

F A SYSTEMS REVISED TO APRIL 1, 1980

GENERAL HIGHWAY MAP
MORRIS COUNTY
KANSAS

PREPARED BY THE
KANSAS DEPARTMENT OF TRANSPORTATION
PLANNING AND DEVELOPMENT DEPARTMENT
IN COOPERATION WITH THE
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

SCALE

1976